Air to anti-ice the nacelle lips (engine air inlet scoops) is taken from the ice protection manifold at each nacelle and ducted forward to a typical double skin construction in the nacelle lips.

A duct runs forward in the fuselage from the main ice protection manifold to supply anti-icing air to the nose radome and the air conditioning ram air scoop.

Three venturis, one in the ice protection air supply manifold to each wing and one in the duct to the empennage, are used to indicate the air flow in each of these ducts, and can be used for trouble-shooting.

An icing indicator probe is installed in the engine inlet air scoop on each inboard nacelle, which in icing conditions, energizes ice warning lights at the systems engineer's and pilot's stations.

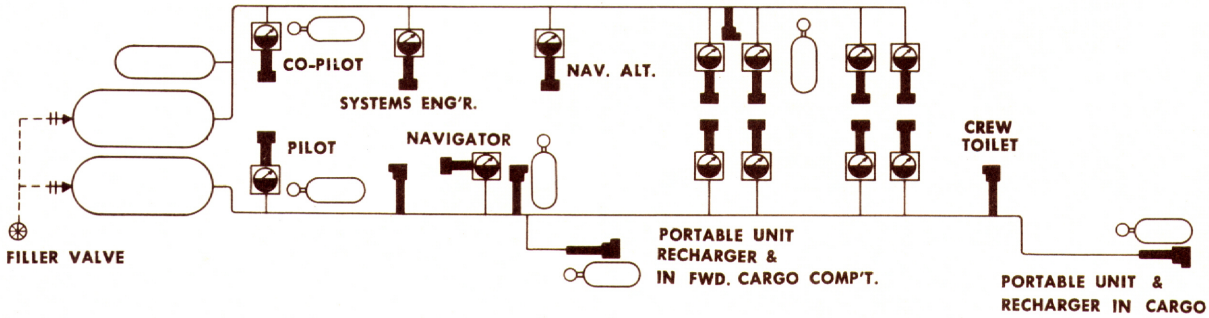
Ice protection for the following components is controlled from the pilot's station and is not shown on the accompanying schematic diagram. The engine and spinners are anti-iced with air bled directly from the high pressure section of the compressor. The propellers are electrically de-iced. Anti-icing and de-fogging of the three forwardmost windshields is accomplished by electrical-conductive coatings on the outer panes. Thermal de-fogging is also provided for the clear-view panel and the windows adjacent to the periscopic sextant.

OXYGEN SYSTEM

The oxygen system for this airplane is adequate to provide for twelve personnel, for unpressurized flights up to 40,000 feet for durations that are possible if decompression should occur near the equitime point on an inter-continental flight where continued flight above 30,000 feet is dictated by fuel economy.

Portable oxygen equipment is provided in the flight compartment for normal use. In the cargo compartment portable oxygen equipment for in-flight inspection by means of a decompression chamber* is provided. Bail-out oxygen equipment is supplied for all personnel.

* The decompression chamber is included as a study item only.



OXYGEN SYSTEM (GASEOUS)